

What Is Claimed Is:

1. A modular connection for connecting together
a plurality of separate elements so as to form an
orthopedic component, said modular connection
comprising, in combination, a taper junction and an
engaged-fit junction.

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2. A modular connection according to claim 1
10 wherein said taper junction is formed by the
interaction of a first taper with a second taper.

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3. A modular connection according to claim 2
wherein said second taper is formed along a portion of
15 a sidewall defining an aperture in a first element,
and said first taper is formed on a projection of a
second element.

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4. A modular connection according to claim 1
20 wherein said engaged-fit junction is formed by the

interaction of a first concentric wall with a second concentric wall.

5 5. A modular connection according to claim 4
wherein said second concentric wall is formed along a portion of a sidewall defining an aperture extending in a first element, and said first concentric wall is formed on a projection of a second element.

10 6. A modular connection according to claim 1
wherein:

15 said taper junction is formed by the interaction of a first taper with a second taper, with said second taper being formed along a portion of a sidewall defining an aperture in a first element, and said first taper being formed on a projection of a second element; and

20 said engaged-fit junction is formed by the interaction of a first concentric wall with a second concentric wall, with said second concentric wall being formed along a portion of a sidewall defining an

aperture extending in a first element, and said first concentric wall is formed on a projection of a second element.

5 7. A modular connection according to claim 6 wherein said first concentric wall is disposed on the projection of the second element coaxial with, and distal to, said first taper.

10 8. A modular connection according to claim 7 wherein said second concentric wall is disposed on the first element coaxial with, and distal to, said second taper.

15 9. A modular connection according to claim 4 wherein said first concentric wall is located internally of said second concentric wall.

20 10. A modular connection according to claim 9 wherein said first concentric wall is deformed so as

to be pressure locked against said second concentric wall.

11. A modular connection according to claim 10
5 wherein said first concentric wall is expanded so as to be pressure locked against said second concentric wall.

12. A modular connection according to claim 11
10 wherein said second concentric wall is formed along a portion of a sidewall defining an aperture in a first element, and said first concentric wall is formed on a projection of a second element, and further wherein said first concentric wall is expanded by insertion of
15 a third element into a recess formed in the second element.

13. A modular connection according to claim 12
20 wherein the aperture extends completely through the first element.

14. A modular connection according to claim 12
wherein the aperture comprises a blind hold formed in
the first element.

5 15. A modular connection according to claim 12
wherein the aperture comprises a pair of parallel
openings.

10 16. A modular connection according to claim 12
wherein said taper junction and said engaged-fit
junction axially overlap one another.

15 17. A modular connection according to claim 4
wherein said first concentric wall is contracted so as
to be pressure locked against said second concentric
wall.

20 18. An orthopedic component comprising a first
element and a second element, with the first element
and the second element being secured to one another
with a modular connection, wherein said modular

connection comprises, in combination, a taper junction and an engaged-fit junction.

19. An orthopedic component according to claim
5 18 wherein said taper junction is formed by the
interaction of a first taper with a second taper.

10 20. An orthopedic component according to claim
19 wherein said second taper is formed along a portion
of a sidewall defining an aperture in said first
element, and said first taper is formed on a
projection of said second element.

15 21. An orthopedic component according to claim
18 wherein said engaged-fit junction is formed by the
interaction of a first concentric wall with a second
concentric wall.

20 22. An orthopedic component according to claim
21 wherein said second concentric wall is formed along
a portion of the sidewall defining an aperture

extending in said first element, and said first concentric wall is formed on a projection of said second element.

5 23. An orthopedic component according to claim 18 wherein:

 said taper junction is formed by the interaction of a first taper with a second taper, said second taper being formed along a portion of a sidewall defining an aperture in said first element, and said first taper being formed on a projection of said second element; and

 said engaged-fit junction is formed by the interaction of a first concentric wall with a second concentric wall, with said second concentric wall being formed along a portion of a sidewall defining the aperture in said first element, and said first concentric wall is formed on a projection of said second element.

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24. An orthopedic component according to claim
23 wherein said first concentric wall is disposed on
the projection of the second element coaxial with, and
distal to, said first taper.

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25. An orthopedic component according to claim
24 wherein said second concentric wall is disposed on
the first element coaxial with, and distal to, said
second taper.

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26. An orthopedic component according to claim
21 wherein said first concentric wall is located
internally of said second concentric wall.

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27. An orthopedic component according to claim
26 wherein said first concentric wall is deformed so
as to be pressure locked against said second
concentric wall.

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28. An orthopedic component according to claim
27 wherein said first concentric wall is expanded so

as to be pressure locked against said second concentric wall.

29. An orthopedic component according to claim
5 28 wherein said second concentric wall is formed along
a portion of a sidewall defining an aperture in said
first element, and said first concentric wall is
formed on a projection of said second element, and
further wherein said first concentric wall is expanded
10 by insertion of a third element into a recess formed
in said second element.

30. An orthopedic component according to claim
29 wherein the aperture extends completely through the
15 first element.

31. An orthopedic component according to claim
29 wherein the aperture comprises a blind hole formed
in the first element.

32. An orthopedic component according to claim
29 wherein the aperture comprises a pair of parallel
openings.

5 33. An orthopedic component according to claim
29 wherein said taper junction and said engaged-fit
junction axially overlap one another.

10 34. An orthopedic component according to claim
21 wherein said first concentric wall is contracted so
as to be pressure locked against said second
concentric wall.

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